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It takes more than soccer to make Argentinians, Brazilians, Chileans and Mexicans happy

Patricia Ferraz Regula - Student #769

A Project carried out under the supervision of:

Professor Regina Carla Madalozzo (Insper – BR)

Professor Paulo M. M. Rodrigues (Nova – PT)

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Abstract

This dissertation explores the socioeconomic determinants of happiness for Argentinians, Brazilians, Chileans and Mexicans, and analyzes its evolution over the years and between these countries. The analysis in this dissertation is based on the World Value Survey waves 2, 3 and 5. With this data it was possible to analyze and compare the determinants that are most relevant for these populations to self-declare themselves as happy. Determinants such as social class, education, employment, among others, showed significance in some years for some populations and were found not significant for others. Health, religion and national pride were the most consistent, always pointing in the same direction and at least statistically significant in one of its categories.

Keywords: happiness; well-being; socioeconomic determinants; Latin America

Summary

1. Introduction

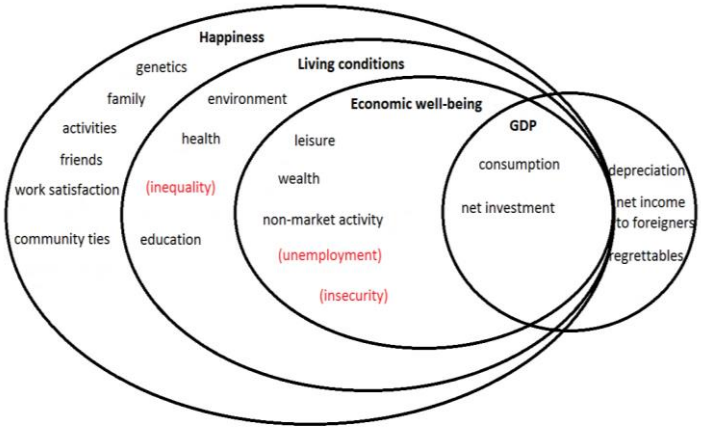
Happiness is a very complex sentiment which Halliwell *et al.* (2012) have divided into two spheres: the first is emotional, related to friendship, family, day-to-day work; and the other is cognitive, encompassing personal and professional satisfaction, health and all human frustrations and satisfactions. In general "Being Happy" is a frequently given answer when people are asked what they wish for their lives, and this answer is based on these two spheres. However, what does make people happy and under what conditions is a person considered happy? Does happiness only depend on the individual and the choices he/she makes in life or is it affected by the environment the individual lives in, by the conditions of life individuals have and the country he/she lives in?

One of the first researchers of this subject was Aristotle, who, in his best-known work on ethics, *Nicomachean Ethics*, indicates that "Happiness is a first principle; for it is for the sake of this we all do all the rest of our actions, and the first principle and cause of goods we take to be something honourable and divine" (ARISTOTLE, 2000, p.20). In a recent psychology study Seligman (2002) proposed a division of happiness into three components: the first is associated to pleasure and gratification; the second is associated to embodiment of strengths and virtues, having a good life with work, friends and family; and the third is related to meaning and purpose, have something to believe in and contribute for.

In economics, happiness is associated to well-being. At the end of the 18th century, Jeremy Bentham (1789) defined his fundamental utilitarianism axiom, which was subsequently expanded by Stuart Mill (1906) giving birth to the well-being theory.

When analyzing happiness of a country we have to take into consideration that each individual has its own preferences, and not only are these personal, but they are not comparable between individuals, i.e., many times what makes one person happy will not necessarily make another person happy as well. In 2006, a Deutsche Bank report[1] revealed more than 15 factors that influence the happiness and well-being of a population; these factors are not only economic, but social and personal as well. Some of these factors will be explored throughout this paper.

Figure 1: Components of well-being and happiness



Source: author, based on Deutsche Bank (2006)

To produce this study a Word Value Survey (WVS) database was used. This database results from a global research that has been conducted since 1981 and that explores the values and behavior of people across different countries. The waves considered in this study are Wave 2 (1991-1993), Wave 3 (1996-1998) and Wave 5 (2005-2007). Four Latin American countries are analyzed (Argentina, Brazil, Chile and Mexico) based on the three different waves, with the goal of identifying the factors that have the

[1]Available at http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000202587.PDF accessed in 15 August 2014

biggest impact on happiness and how they behave over time. Answers associated to social class (income), health, group age, civil status and religion were used to understand the determinants that lead an individual to be or to self-declare him/herself as happy.

Easterlin (1974) concluded that income is directly linked with happiness, but overtime this linkage stops being valid. In the countries studied by Easterlin, people with higher income were self-declared happier than people with lower income, but when the comparison was conducted between countries the linkage between income and happiness was not different, even between countries with a substantial income difference.

Pukeliene and Kisieliauskas (2013) concluded that individuals of developed countries are more likely to be happy than those in developing countries. However, the four developing countries that were studied are among the 30 happiest of the world according to "The United Nations General Assembly's second World Happiness Report" (2013). Mexico is the happiest of all four, taking up the 16th position, followed by Brazil (24th), Chile (28th) and Argentina (29th). Pukeliene and Kisieliauskas (2013) concluded also that in 11 of the 21 countries analysed there is a strong to mild relationship between income and well-being.

For Latin America, Corbi and Menezes-Filho (2005) examined the empirical determinants of happiness in Brazil using Wave 3 of the WVS and concluded that people with higher income and with a job tend to be happier. A recent study by Tetaz (2012), also using the WVS database, showed that for Argentina income is not always a relevant determinant of happiness, e.g., for the capital Buenos Aires, it was only relevant during the year of 2006.

Although several authors have written and studied about the subject, when discussing Brazil and Latin America, this is far from well explored. Argentina and Brazil

were only analyzed in the papers mentioned above and for Mexico and Chile, no country-specific references have been found.

Another theme that is often questioned by sceptical economists when discussing happiness is the existence of causality of the employed variables, e.g., healthy people are happier or happy people are healthier. Cheah and Tang (2013) showed that, for instance in Malaysia, variables associated to health, education and civil status influence local happiness. Furthermore, Cheah and Tang showed that being employed does not have an influence on happiness, probably because with more time to spare happiness is found in different ways, e.g. spending more time with family.

Variables such as religion and national pride were not yet well explored in other papers and, therefore, are considered in our analysis. All other variables that were already proved relevant in other studies, such as income[2], health, and education are also used in this study.

The remainder of the dissertation is organised as follows. Section 2 introduces the description and analyzes the database used. In section 3, the methodology is described and in section 4 the results obtained are discussed. Finally, in section 5 the main conclusions of this dissertation will be presented and suggestions for follow-up studies and research in this field will be pointed out.

[2] Most studies make use of income (divided into 10 categories by WVS) as a financial variable, however, when examining the databases it became clear that there is no rule for determining this variable. In some countries, a card was showed with different ranges and participants would point out on which they would fit, in others the participants would inform their income and then these were divided into 10 groups. For this reason we have opted to use the social class variable, although this is subjective variable there is a purchase power and pyramid that is relevant to the study.

2. Data analysis

The Word Value Survey (WVS) is, along with the Latinobarómetro, one of the most important indicators regarding well-being and behavior for Latin America. Divided into waves (every two or three years), the WVS is carried out since 1981 and has worldwide reach. For this dissertation we will use waves 2, 3 and 5, because the countries subject to this study are present in all three, enabling a direct comparison between them. Given the extension of the survey, over two hundred questions, not all questions were used due to relevance.

Since data from three different waves was used and these have a gap of 15 years between the oldest (wave 2) and the most recent (wave 5), some data had to be adjusted in order to allow for comparison, but maintaining fidelity to the original source and the overall theme of the questions and answers. Below is the distribution of the answer for the happiness question for the four countries and the three different waves. The answer has four different alternatives: "Not at all happy", "Not very happy", "Quite happy", "Very happy". Below we have the distribution for the answers "Not very happy"[3] and "Very happy".

Table 1: Happiness by age group – WVS wave 2, wave 3 and wave 5

Argentina

	Wave 2 (1991)		Wave 3 (1995)		Wave 5 (2005)	
Happiness level	**Not very happy**	**Very happy**	**Not very happy**	**Very happy**	**Not very happy**	**Very happy**
Age group	%	%	%	%	%	%
18-24 years old	11.95%	35.85%	15.85%	32.24%	6.08%	38.12%
25-34 years old	14.98%	36.71%	14.16%	28.76%	9.02%	36.07%
35-44 years old	18.58%	34.43%	14.92%	28.86%	13.95%	31.40%
45-54 years old	21.43%	33.33%	15.62%	30.00%	11.65%	34.25%
+55 years old	23.42%	27.13%	15.00%	31.43%	15.58%	23.55%

[3] The classification "Not at all happy" was not used in this comparison since the portion of people self-declared "Not at all happy" is too small. Instead, to make the comparison easier, the category "Not very happy" was used as replacement.

Brazil						
	Wave 2 (1991)		Wave 3 (1997)		Wave 5 (2006)	
Happiness level	Not very happy	Very happy	Not very happy	Very happy	Not very happy	Very happy
Age group	%	%	%	%	%	%
18-24 years old	23.92%	17.77%	16.36%	21.09%	8.33%	43.33%
25-34 years old	23.20%	17.60%	17.02%	24.92%	9.50%	34.56%
35-44 years old	22.66%	19.63%	14.17%	22.50%	8.57%	32.06%
45-54 years old	24.14%	24.14%	12.65%	18.67%	9.80%	30.59%
+55 years old	16.29%	25.31%	13.00%	19.00%	9.31%	30.00%
Chile						
	Wave 2 (1990)		Wave 3 (1996)		Wave 5 (2005)	
Happiness level	Not very happy	Very happy	Not very happy	Very happy	Not very happy	Very happy
Age group	%	%	%	%	%	%
18-24 years old	23.97%	34.07%	16.75%	27.75%	8.77%	42.69%
25-34 years old	20.54%	33.42%	16.10%	27.34%	11.89%	35.27%
35-44 years old	24.05%	35.74%	17.35%	29.08%	14.35%	33.49%
45-54 years old	25.13%	31.79%	18.37%	23.53%	22.36%	25.47%
+55 years old	33.78%	31.08%	25.71%	29.52%	22.31%	29.23%
Mexico						
	Wave 2 (1990)		Wave 3 (1996)		Wave 5 (2005)	
Happiness level	Not very happy	Very happy	Not very happy	Very happy	Not very happy	Very happy
Age group	%	%	%	%	%	%
18-24 years old	24.35%	25.77%	24.12%	32.92%	6.06%	60.60%
25-34 years old	25.71%	29.19%	32.01%	26.25%	5.62%	64.87%
35-44 years old	27.20%	24.40%	29.15%	27.25%	8.17%	59.48%
45-54 years old	32.65%	28.57%	29.79%	23.29%	9.16%	59.16%
+55 years old	34.26%	19.45%	31.79%	29.74%	13.70%	46.57%

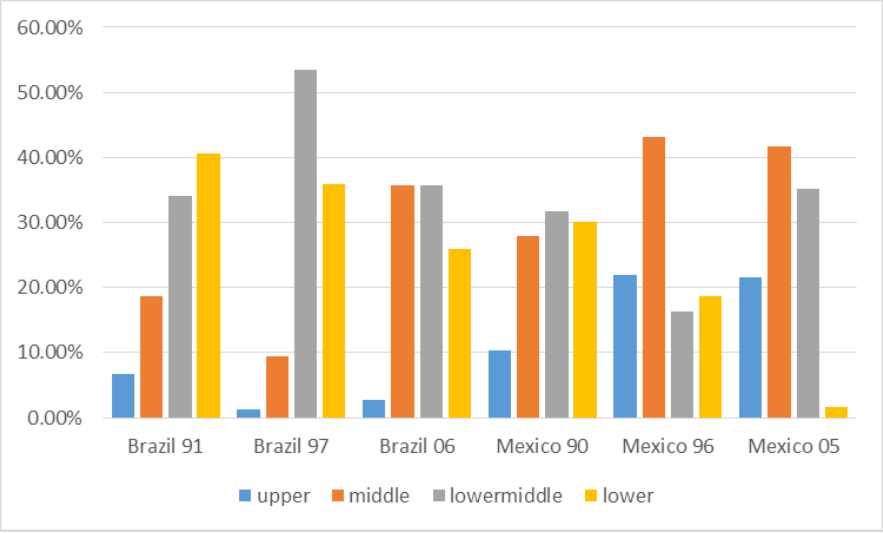
Source: author, based on World Value Survey

From the analysis of the data in table 1, an improvement of the happiness sentiment for all countries analyzed is observed between wave 2 and wave 5, but mainly among the younger groups. Hence, it is possible that the perception of well-being of people improved in these countries. When analyzing Brazil and Mexico, beyond the drop in the volume of people self-declared as “Not very happy”, an increase of people self-declared as “Very happy” is observed, which can lead us to think that in these countries

the quality of live improved substantially. Still, the question remains: Has such an improvement actually occurred?

Paying particular attention to these two countries – Brazil and Mexico – and evaluating the social class variable (Figure 2), it is possible to notice that, at first, there is a direct and growing relationship between income and happiness, as concluded by Richard Easterlin (1974) and confirmed by many other researchers. There was a significant improvement in the population's financial status between the 15 years of wave 2 and 5, mainly for Mexico, where the number of individuals self-declared as belonging to the lower class is less than 2%, a drop of more than 28% when compared to 1990. It is worth mentioning that both Brazil and Mexico started cash transfer programs by the end of the 90s. Hence, raising the question of whether public policies play a role in the nation's happiness.

Figure 2: Social class distribution in Brazil and Mexico



Source: author, based on World Value Survey

3. Methodology

To analyse the determinants of happiness, an ordered probit model was applied. This type of model allows for the analysis of the different potential influencing factors on

the well-being (happiness) of individuals. Unlike other traditional models where the explained (dependent) variable is continuous, this type of model allows us to consider a dependent variable that ranks all results. Our explained variable happiness takes the following values: 1 – "Not at all happy", 2 – "Not very happy", 3 – "Quite happy", 4 – "Very happy". The ordered probit model takes into consideration the ordinal nature of the dependent variable. Currently, this is the most frequently used econometric model when the study subject is happiness and we have as answer a subjective and multinomial-choice variable, however, several studies, such as e.g. Moro *et al.* (2008) and Tetaz (2012), also use the ordinary least squares method and no differences were noticed in the results.

The regression is the same as the traditional probit model. The latent variable representation used is

$H_i^* = X_i'\beta + \varepsilon_i$ where H* is a latent variable, from which we obtain an estimation of H (happiness) as,

$$H = \begin{cases} 1, if\ H^* \leq 0 \\ 2, if\ 0 < H^* \leq \mu_1 \\ 3, if\ \mu_1 < H^* \leq \mu_2 \\ 4, if\ \mu_2 \leq H^* \end{cases}$$

In this model we assume that ε_i is normally distributed and when normalizing for N(0,1) we have the following probabilities, where Φ is the cumulative distribution function:

Prob (H=1) = $\Phi\ (-\beta X)$

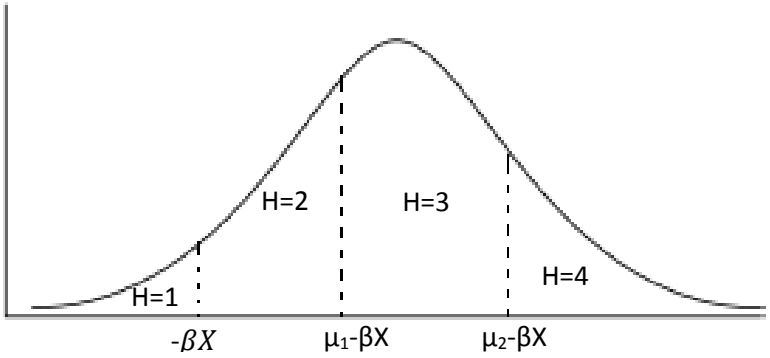
Prob (H=2) = $\Phi\ (\mu_1 - \beta X)\ - \Phi\ (-\beta X)$

Prob (H=3) = $\Phi\ (\mu_2 - \beta X)\ - \Phi\ (\mu_1 - \beta X)$

Prob (H=4) = 1 - $\Phi\ (\mu_2 - \beta X)$

The graphical distribution is as follows:

Figure 3: Normal distribution of function H (happiness)



Source: author, based on Econometric Analysis (Greene, 2003)

The software employed to conduct this work was Stata and all regressions were carried out using the *oprobit* function. When using this model it is necessary to calculate the marginal effect, and the direction and statistical significance must be analyzed. The probability of each of the answers Prob (H=1, 2, 3 or 4) is also computed. All results obtained can be found in the following section.

4. Results

In order for the results to be comparable between countries and years, the same regression was estimated for all countries and waves, except when data was not available and could not be proxied. The independent variables employed reflect civil status[4], genre[5], health condition[6], parenting[7], age[8], national pride[9], education[10], employment status[11],

[4] Variable with 6 categories in the WVS that was group into 4: single (base), married, divorced and widowed
[5] Genre variable: man (base) and woman
[6] Variable with 4 categories: poor health (base), fair health, good health and very good health
[7] Variable grouped into 2 categories: no kids (base) and with kids
[8] Variable grouped into 5 categories: Less than 24 years old (base), between 25 and 34 years old, between 35 and 44 years old, between 45 and 54 years old and more than 55 years old
[9] Variable with 4 categories: not at all proud (base), not very proud, proud and very proud
[10] This variable changes among waves. Grouped by no formal education (base), elementary school, secondary school and higher education
[11] Variable with 5 categories: unemployed, employed, student, housewife and retired

race[12], and membership of social organization[13]. For religion[14], a variable to determine frequency of attending cults was empl oyed, in other words, the level of participation in that religion and not the religious belief itself was considered. As previously mentioned, due to measuring issues and difficulties comparing income, the subjective variable for social class[15] was used instead. Below, tables 2, 3, 4 and 5 show the regression results obtained. For additional details, the calculated marginal effects for the last wave can be found for all countries in appendix 1.

From the results obtained from tables 2, 3, 4 and 5 we confirm that the determinants for happiness suffer modifications over the years, even for the same country. When we analyze the variable for gender, it is possible to see that it is significant for Brazil and Mexico (wave 2) and Chile (wave 5), for Chile and Mexico the variable is positively associated with happiness, i.e., women are more likely to be happier than men. This result supports Graham and Chattopadhyay's (2012) study, which shows that globally women are happier than men.

When we analyze civil status for the four countries that are the focus of this dissertation we can draw the same conclusions as in Stack and Eshleman (1998), that married people are happier than single, in Brazil and Chile. In the three waves studied the coefficients are positive and statistically significant. Divorced and widowed people tend to be less happy than singles. For the health variables it is possible to once again support studies such as in Graham (2008), for all countries and waves, in that healthier people are happier than those that are not so healthy.

[12] Race variable grouped into 3 categories: white Caucasian (base), black and others races. All black variations were grouped in just black. This variable was not available for Argentina on waves 2 and 3

[13] The construction of this variable took into consideration if the person was an active member in one of the 10 organizations present in the WVS

[14] Church frequency variable with 3 categories: religious, not very religious, not at all religious (base)

[15] Grouped into 4 categories: Upper (A B), middle (C), lower middle (D) and lower (E)

Age and education are two variables that when statistically significant do not have the same effect as presented in Blanchflower and Oswald (2004) and Noval and Garvi (2012), respectively. For Blanchflower and Oswald (2004) “Age x Happiness” is an U-shaped curve (with the minimum point at around 50 years old). In Brazil we have found that although younger people are happier, the subsequent age groups do not decline in happiness (see Appendix 1), having in this country the minimum point between 25 and 34 years old. The variable education is negative for Chile and positive for Mexico, in both cases statistically significant, but even when it takes the expected sign (positive) that Noval and Garvi (2012) found, the marginal effect for higher education is inferior than the marginal effect for elementary and secondary school (see appendix 1), different from what was exposed by Noval and Garvi (2012) .

The social class variable although not always significant supports Easterlin (1974). It confirms that wealthier people are happier than those in lower classes. Some scenarios suffer a slight reversion in wave 5 (Argentina).

For the variable "active member of a social organization", it is possible to detect its relevance for Mexico in wave 3 and wave 5, with negative and positive coefficients, respectively. A possible interpretation for this variation was the political scenario in Mexico during 1996 (wave 3), where several conflicts took place and social organizations were involved with manifestations, possibly influencing the coefficient.

For all countries, when significant, black people suffer a negative impact in happiness levels. Parenthood, also leads to a negative impact, not supporting the results obtained for England and Germany by Myrskylä and Margolis (2014). A possible explanation for this could be associated to the parenting support programs offered by these developed countries, something that is not found in Latin American countries. Last,

we have observed that national pride, in accordance with Reeskens and Wright (2011) and being religious, as shown by Lim and Putnam (2010) are always positively associated to happiness.

Table 2: Regression Results – Argentina all 3 waves

Argentina			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Woman	-0.020	-0.009	-0.024
	(0.085)	(0.084)	(0.086)
Fair health	0.429***	0.218	0.907***
	(0.138)	(0.144)	(0.232)
Good health	0.557***	0.520***	1.251***
	(0.133)	(0.142)	(0.228)
Very good health	0.992***	0.950***	1.803***
	(0.155)	(0.154)	(0.237)
Married	0.232	0.328**	0.144
	(0.157)	(0.133)	(0.145)
Divorced	-0.227	-0.192	-0.449**
	(0.214)	(0.189)	(0.201)
Widowed	-0.364*	0.088	-0.109
	(0.212)	(0.196)	(0.204)
With children	0.084	-0.099	-0.109
	(0.153)	(0.126)	(0.139)
Religious	0.088	0.049	0.302***
	(0.098)	(0.093)	(0.108)
Not very religious	-0.027	0.069	0.055
	(0.088)	(0.086)	(0.086)
Not very national pride	0.042	-0.261	-0.007
	(0.170)	(0.173)	(0.252)
National pride	0.055	0.309**	0.050
	(0.151)	(0.147)	(0.174)
Very national pride	0.294**	0.502***	0.438***
	(0.149)	(0.142)	(0.168)
Between 25 - 34 years old	-0.150	-0.091	0.001
	(0.128)	(0.103)	(0.138)
Between 35 - 44 years old	-0.343**	-0.189	-0.085
	(0.147)	(0.116)	(0.161)
Between 45 - 54 years old	-0.432***	-0.115	-0.033
	(0.153)	(0.126)	(0.171)
More than 55 years old	-0.515***	-0.100	-0.217
	(0.165)	(0.125)	(0.167)
Elementary school	0.013	0.006	-0.283
	(0.136)	(0.138)	(0.250)
Secondary school	-0.291**	0.009	-0.171
	(0.133)	(0.130)	(0.254)
Higher education	-0.169	0.196	-0.116
	(0.118)	(0.161)	(0.274)
Employed	0.020	0.371***	0.310*
	(0.176)	(0.113)	(0.164)
Retired	0.044	0.142	0.574***
	(0.211)	(0.159)	(0.208)

Argentina			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Housewife	0.024	0.142***	0.344*
	(0.194)	(0.159)	(0.193)
Student	0.010	0.275	0.535**
	(0.253)	(0.174)	(0.221)
Class AB (upper)	0.179	-0.077	0.563***
	(0.150)	(0.795)	(0.154)
Class C (middle)	0.322***	0.175	0.309*
	(0.124)	(0.118)	(0.120)
Class D (lower-middle)	0.188	0.020	0.386***
	(0.124)	(0.078)	(0.113)
Black	-	-	-0.712***
			(0.236)
Other races	-	-	-0.049
			(0.123)
Part of social organization	-0.001	0.049	0.088
	(0.084)	(0.078)	(0.118)
# Observations	986	1068	992
R2	0.059	0.074	0.116
Cut 1	-1.248	-1.006	-0.392
Cut 2	-0.135	0.224	0.850
Cut 3	1.165	1.849	2.684

Notes:

1 –*** significant at 1% ** significant at 5% * significant at 10%

2 – In parenthesis: robust standard error

Table 3: Regression Results – Brazil all 3 waves

Brazil			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Woman	-0.113*	-0.126	0.041
	(0.064)	(0.080)	(0.066)
Fair health	0.503***	1.047***	0.322
	(0.183)	(0.279)	(0.242)
Good health	0.810***	1.389***	0.678***
	(0.182)	(0.280)	(0.243)
Very good health	1.158***	1.871***	1.337***
	(0.190)	(0.290)	(0.252)
Married	0.369***	0.496***	0.229**
	(0.107)	(0.121)	(0.100)
Divorced	0.102	0.145	0.104
	(0.143)	(0.179)	(0.131)
Widowed	0.057	0.020	0.095
	(0.163)	(0.213)	(0.168)
With children	-0.116	-0.272**	-0.004
	(0.104)	(0.122)	(0.097)
Religious	0.208***	0.095	0.146**
	(0.069)	(0.110)	(0.073)
Not very religious	-0.044	-0.216**	0.120
	(0.064)	(0.100)	(0.083)
Not very national pride	-0.036	-0.368	-0.421***
	(0.143)	(0.277)	(0.147)
National pride	0.236**	0.157	-0.140
	(0.118)	(0.274)	(0.124)

Brazil			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Very national pride	0.371***	0.120	0.171
	(0.114)	(0.266)	(0.129)
Between 25 - 34 years old	0.056	-0.077	-0.367***
	(0.090)	(0.103)	(0.110)
Between 35 - 44 years old	-0.003	-0.034	-0.343***
	(0.087)	(0.118)	(0.117)
Between 45 - 54 years old	0.142	-0.072	-0.281**
	(0.106)	(0.130)	(0.128)
More than 55 years old	0.246**	-0.063	-0.233
	(0.117)	(0.156)	(0.144)
Elementary school	-0.136	-0.129	0.022
	(0.156)	(0.135)	(0.258)
Secondary school	-0.131	-0.090	-0.048
	(0.158)	(0.122)	(0.261)
Higher education	-0.052	-0.128	0.052
	(0.177)	(0.145)	(0.265)
Employed	0.101	0.126	0.180**
	(0.095)	(0.111)	(0.085)
Retired	0.295**	0.232	0.208
	(0.145)	(0.162)	(0.137)
Housewife	0.078	0.211	0.012
	(0.124)	(0.142)	(0.128)
Student	0.248	0.006	0.108
	(0.171)	(0.181)	(0.157)
Class AB (upper)	0.247**	1.057***	0.188
	(0.121)	(0.299)	(0.199)
Class C (middle)	0.077	0.432***	0.237***
	(0.079)	(0.131)	(0.084)
Class D (lower-middle)	0.016	0.288***	0.097
	(0.065)	(0.076)	(0.081)
Black	-0.008	-0.142*	0.051
	(0.074)	(0.085)	(0.065)
Other races	0.039	-0.292	0.186
	(0.211)	(0.185)	(0.186)
Part of social organization	-0.038	0.114	0.051
	(0.058)	(0.075)	(0.145)
# Observations	1777	1148	1496
R2	0.056	0.104	0.086
Cut 1	-0.824	-0.722	-1.702
Cut 2	0.547	0.552	-0.395
Cut 3	2.184	2.517	1.517

Notes:

1 –*** significant at 1% ** significant at 5% * significant at 10%

2 – In parenthesis: robust standard error

Table 4: Regression Results – Chile all 3 waves

Chile			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Woman	0.040	-0.170*	0.150*
	(0.072)	(0.092)	(0.087)
Fair health	0.544***	0.484***	0.516***
	(0.143)	(0.186)	(0.187)

Chile			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Good health	0.839***	0.721***	0.765***
	(0.145)	(0.186)	(0.187)
Very good health	1.199***	1.155***	1.468***
	(0.164)	(0.209)	(0.209)
Married	0.348***	0.254**	0.232*
	(0.112)	(0.107)	(0.129)
Divorced	0.020	-0.290	-0.265
	(0.165)	(0.190)	(0.165)
Widowed	0.009	-0.237	-0.242
	(0.175)	(0.191)	(0.229)
With children	-0.011	0.436	0.054
	(0.106)	(0.628)	(0.134)
Religious	0.244***	0.384***	0.160
	(0.074)	(0.100)	(0.103)
Not very religious	0.110	0.056	-0.070
	(0.071)	(0.089)	(0.084)
Not very national pride	0.082	0.238	-0.534
	(0.213)	(0.325)	(0.326)
National pride	0.327	0.461	-0.395
	(0.201)	(0.313)	(0.281)
Very national pride	0.382*	0.743**	-0.190
	(0.201)	(0.314)	(0.280)
Between 25 - 34 years old	-0.084	-0.055	-0.019
	(0.091)	(0.120)	(0.154)
Between 35 - 44 years old	-0.107	-0.079	-0.146
	(0.106)	(0.137)	(0.173)
Between 45 - 54 years old	-0.213*	-0.179	-0.253
	(0.114)	(0.140)	(0.186)
More than 55 years old	-0.204*	-0.106	-0.158
	(0.119)	(0.151)	(0.190)
Elementary school	0.021	-0.321*	-0.636**
	(0.139)	(0.194)	(0.312)
Secondary school	-0.001	-0.352**	-0.576*
	(0.122)	(0.157)	(0.316)
Higher education	-0.045	-0.383**	-0.692**
	(0.113)	(0.175)	(0.336)
Employed	0.129	0.044	0.389**
	(0.140)	(0.178)	(0.161)
Retired	-0.064	0.012	0.372*
	(0.181)	(0.238)	(0.215)
Housewife	0.229	0.137	0.322*
	(0.156)	(0.205)	(0.181)
Student	0.227	0.124	0.541**
	(0.165)	(0.220)	(0.212)
Class AB (upper)	0.435***	0.628	0.637***
	(0.118)	(0.727)	(0.152)
Class C (middle)	0.228***	0.344***	0.328***
	(0.084)	(0.117)	(0.117)
Class D (lower-middle)	0.260***	0.223***	0.171
	(0.081)	(0.087)	(0.122)
Black	-0.469		-0.829**
	(0.360)	-	(0.418)
Other races	-0.103	-0.021	0.213
	(0.154)	(0.123)	(0.132)

Chile			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Part of social organization	-0.031	0.090	0.151*
	(0.060)	(0.078)	(0.078)
# Observations	1486	996	998
R2	0.056	0.087	0.105
Cut 1	-0.555	-1.087	-1.755
Cut 2	0.923	0.761	-0.291
Cut 3	2.033	2.378	1.290

Notes:

1 –*** significant at 1% ** significant at 5% * significant at 10%

2 – In parenthesis: robust standard error

Table 5: Regression Results – Mexico all 3 waves

Mexico			
Variables	**Wave 2**	**Wave 3**	**Wave 5**
Woman	0.163**	0.038	0.023
	(0.068)	(0.056)	(0.083)
Fair health	0.302*	0.650***	0.591***
	(0.164)	(0.097)	(0.173)
Good health	0.611***	1.238***	0.991***
	(0.161)	(0.097)	(0.176)
Very good health	0.911***	1.831***	1.654***
	(0.169)	(0.111)	(0.190)
Married	0.141	0.070	0.069
	(0.117)	(0.094)	(0.117)
Divorced	-0.317*	-0.083	-0.404***
	(0.176)	(0.124)	(0.157)
Widowed	-0.112	-0.181	-0.259
	(0.170)	(0.156)	(0.194)
With children	-0.103	-0.180**	0.094
	(0.112)	(0.090)	(0.114)
Religious	0.060	0.010	0.133
	(0.075)	(0.061)	(0.088)
Not very religious	0.069	-0.047	0.068
	(0.077)	(0.064)	(0.088)
Not very national pride	-0.205	-0.059	0.178
	(0.194)	(0.137)	(0.388)
National pride	0.032	0.115	0.200
	(0.174)	(0.113)	(0.363)
Very national pride	0.163	0.559***	0.502
	(0.173)	(0.109)	(0.355)
Between 25 - 34 years old	-0.003	-0.069	0.139
	(0.086)	(0.070)	(0.105)
Between 35 - 44 years old	0.004	0.013	0.045
	(0.102)	(0.082)	(0.118)
Between 45 - 54 years old	0.067	0.037	0.057
	(0.118)	(0.092)	(0.123)
More than 55 years old	-0.166	0.255**	-0.002
	(0.141)	(0.113)	(0.136)
Elementary school	-0.048	0.034	0.426***
	(0.138)	(0.096)	(0.140)

Mexico

Variables	Wave 2	Wave 3	Wave 5
Secondary school	0.026	0.001	0.481***
	(0.104)	(0.086)	(0.148)
Higher education	-0.009	0.085	0.340**
	(0.075)	(0.101)	(0.159)
Employed	-0.113	0.183**	0.205*
	(0.134)	(0.092)	(0.121)
Retired	-0.187	-0.113	0.335
	(0.220)	(0.160)	(0.217)
Housewife	-0.179	0.043	0.196
	(0.157)	(0.106)	(0.142)
Student	-0.191	0.113	0.217
	(0.156)	(0.116)	(0.190)
Class AB (upper)	0.456***	0.576***	0.368**
	(0.101)	(0.147)	(0.155)
Class C (middle)	0.370***	0.235***	0.192
	(0.083)	(0.071)	(0.144)
Class D (lower-middle)	0.239***	0.077	0.113
	(0.078)	(0.055)	(0.147)
Black	-0.064	-0.988***	0.014
	(0.073)	(0.280)	(0.079)
Other races	-0.159	0.070	0.109
	(0.146)	(0.065)	(0.260)
Part of social organization	0.080	-0.142***	0.120*
	(0.061)	(0.050)	(0.120)
# Observations	1468	2328	1554
R2	0.049	0.134	0.102
Cut 1	-1.443	-0.787	-0.326
Cut 2	0.168	0.996	0.995
Cut 3	1.419	2.237	2.288

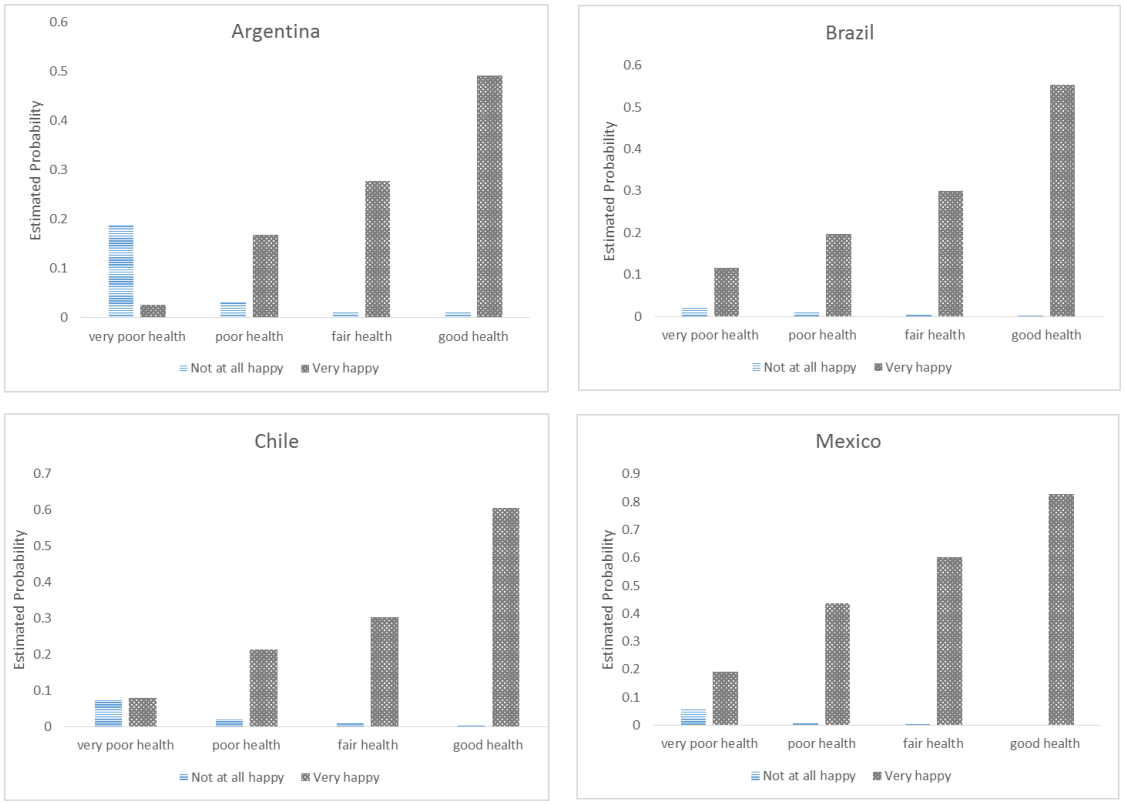
Notes:

1 – *** significant at 1%, ** significant at 5%, * significant at 10%

2 – In parenthesis: robust standard error

Some charts are shown below with the estimated probabilities. In chart 2 we have the relation between health and happiness and it supports what was discussed, the healthier an individual is, the higher is the probability of the individual to be happy, and the least healthy, the lower the probability of being happy will become.

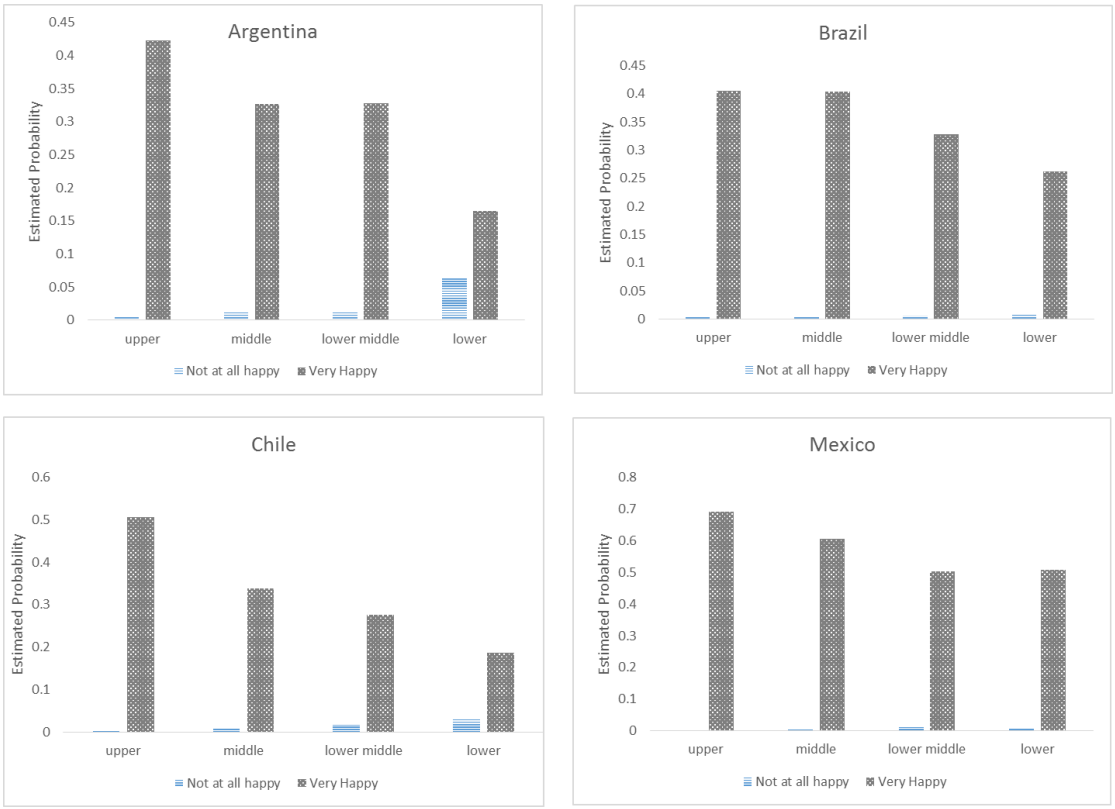
Chart 2: Happiness x Health - Wave 5 for all countries



Source: Author

In chart 3 we compared the probability of being happy with social classes. For Argentina, Brazil and Chile we have confirmed the results of Easterlin (1974), i.e. that the higher the social class the higher the chances of being happy, although for Mexico and Argentina we have unveiled a reversed scenario between lower-middle class and lower class (Mexico), where the lower class has a smaller probability of being unhappy and higher probability of being happier than lower-middle class and between middle class and lower-middle class (Argentina), where the lower-middle class has a higher probability of being happier and a smaller probability of being unhappy than middle class.

Chart 3: Happiness x Social Class- Wave 5 for all countries



Source: Author

5. Conclusion

This dissertation has the intention to examine the socioeconomic determinants that directly affect the self-perception of happiness. We observed for all four countries studied that having a good health is the most important statement for an individual to be self-declared happy. For Argentinians being happy is also related to religion, social class and formal occupation; for Brazilians being happy is associated to being married and young; for Chileans being female increases happiness while being of the black race decreases the happiness perception and for Mexicans being a member of a social organization and having formal education raises the happiness probability.

Learning about happiness determinants should help governments develop better policies and invest in localized and even more focused public efforts that promote the

overall population well-being. In countries such as the United States and England, happiness and well-being studies are frequently used as a government source.

The results we observed showed that happiness determinants change across countries and years, but we also observed that some of them have always significance to increase or decrease happiness, so that these ones are the ones that should be the focus of any public policy for well-being.

This dissertation confirmed some existing results in the literature regarding genre, social class, religious and health, however, it does not support existing results regarding education and age. It is important to note that when specifically discussing Latin America these results are new and should contribute to the understanding of the determinants of happiness for people in developing countries.

There is plenty of data we can explore to help us understand happiness in Latin America, this dissertation is just a persuasive beginning when we think about well-being in developing countries and which hopes to motivate governments and institutions to use this kind of data to build more effective actions, where most of the population should be positively impacted by the changes.

6. Appendix

Marginal Effects - Wave 5				
dy/dx - "Very Happy" probability				
Variables	**Argentina**	**Brasil**	**Chile**	**México**
Woman	-0.008	0.015	0.052*	0.009
Fair health	0.338***	0.119	0.188***	0.219***
Good health	0.418***	0.242***	0.264***	0.362***
Very good health	0.619***	0.491***	0.536***	0.487***
Married	0.049	0.082**	0.080*	0.027
Divorced	-0.136***	0.038	-0.087	-0.160***
Widowed	-0.036	0.035	-0.079	-0.102
With children	-0.017	0.001	0.019	0.037
Religious	0.108***	0.052**	0.057	0.051
Not very religious	0.019	0.043	-0.023	0.026
Not very national pride	-0.002	0.138***	-0.159	0.067
National pride	0.017	0.050	-0.132	0.076
Very national pride	0.146***	0.062	-0.067	0.197
Between 25 - 34 years old	0.001	-0.125***	-0.007	0.053
Between 35 - 44 years old	-0.029	-0.117***	-0.050	0.017
Between 45 - 54 years old	-0.011	-0.096**	-0.084	0.022
More than 55 years old	-0.072	-0.081	-0.054	-0.001
Elementary School	-0.094	0.008	-0.197**	0.160***
Secondary school	-0.059	0.017	-0.204*	0.183***
Higher Education	-0.038	0.019	-0.208**	0.128**
Employed	0.105**	0.065**	0.135**	0.079*
Retired	0.213***	0.077	0.138*	0.123
Housewife	0.124*	0.004	0.117*	0.075
Student	0.200**	0.040	0.205**	0.082
Class AB (upper)	0.210***	0.070	0.240***	0.137**
Class C (middle)	0.109***	0.086***	0.115***	0.074
Class D (lower-middle)	0.133***	0.035	0.061	0.043
Black	-0.187***	0.018	-0.214***	0.005
Other races	-0.016	0.069	0.077	0.042**
Part of social organization	0.029	0.018	0.053*	0.047
Estimated Probability	0.290	0.324	0.302	0.594

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